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Claims

[c1] An automotive interior trim assembly, comprising:
a substrate; and
an ashtray coupled to said substrate and adapted to store one or more items, said ashtray comprising:
a compartment body defining a cavity adapted to store the one or more items and having an opening for gaining access to said cavity, said compartment body including at least one connecting member integrally formed therein made from a first material; and
a cover including at least one connecting member integrally formed therein and made from a second material having a different melting point from said first material, said at least one body connecting member cooperating with said at least one cover connecting member to couple said cover to said compartment body, said cover being moveable between an open position, wherein said cavity is accessible through said opening, and a closed position, wherein said cover overlies said opening.

[c2] The trim assembly of claim 1, wherein said at least one body connecting member comprises at least one projecting portion extending therefrom, and wherein said at

least one cover connecting member comprises at least one receiving portion therein which receives said at least one projecting portion.

[c3] The trim assembly of claim 2, wherein said at least one projecting portion defines a pin.

[c4] The trim assembly of claim 2, wherein said at least one receiving portion defines a bore.

[c5] The trim assembly of claim 1, wherein said at least one body connecting member includes a pair of spaced apart connecting members, each said pair of spaced apart connecting members having at least one projecting portion defining a pin having an enlarged distal end defining a circular portion, and wherein said at least one cover connecting member includes one connecting member, said cover connecting member including a pair of spaced apart receiving portions with each defining a bore having an enlarged receiving portion defining a circular recess, each said recess receiving one of said circular portions to couple said cover to said compartment body.

[c6] The trim assembly of claim 1, wherein said cover is pivotally movable between said open and closed position.

[c7] The trim assembly of claim 1, wherein said first material is polycarbonate/acrylonitrile butadiene styrene and the

second material is selected from the group consisting of polypropylene, polyoxymethylene, and polyamide 6.

[c8] The trim assembly of claim 1, wherein said first material has a higher melting point than said second material.

[c9] The trim assembly of claim 1 configured as a door panel.

[c10] A method of forming an automotive ashtray in a two-shot molding operation, comprising:
molding a first member as one of a compartment body and a cover having at least one connecting member by injecting a first curable material in a first shot of the molding operation;
forming a mold chamber about a portion of the at least one connecting member; and
molding a second member as the other one of the compartment body and the cover having at least one connecting member by injecting into the mold chamber a second curable material in a second shot of the molding operation, the second member being molded so that the at least one first member connecting member and the at least one second member connecting member are pivotally coupled together.

[c11] The method of claim 10, wherein molding the first member comprises molding the compartment body having

the at least one connecting member, and wherein molding the second member comprises molding the cover having the at least one connecting member.

[c12] The method of claim 11 wherein the at least one body connecting member includes at least one projecting portion extending therefrom, and wherein the at least one cover connecting member includes at least one receiving portion therein, the at least one receiving portion molding around the at least one projecting portion so that the at least one body connecting member and the at least one cover connecting member are pivotally coupled together.

[c13] The method of claim 12, wherein the at least one projecting portion defines a pin.

[c14] The method of claim 12, wherein the at least one receiving portion defines a bore.

[c15] The method of claim 10, wherein molding the first member comprises molding the compartment body having the at least one connecting member, the at least one body connecting member including a pair of spaced apart connecting members, each of the pair of spaced apart body connecting members having at least one projecting portion defining a pin having an enlarged distal

end defining a circular portion, the compartment body, after molding, further defining a cavity adapted to store one or more items and having an opening for gaining access to said cavity, and wherein molding the second member comprises molding the cover having the at least one connecting member, the at least one cover connecting member including one connecting member, the cover connecting member including a pair of spaced apart receiving portions with each defining a bore having an enlarged receiving portion defining a circular recess, each recess molding around one of the circular portions to pivotally couple together the compartment body and cover.

[c16] The method of claim 10, wherein the first curable material has a higher melting point than the second curable material.

[c17] The method of claim 10, wherein the first curable material is polycarbonate/acrylonitrile butadiene styrene and the second curable material is selected from the group consisting of polypropylene, polyoxymethylene, and polyamide 6.

[c18] The method of claim 10, wherein the second member is molded at a position 180 degrees relative to the first member.

[c19] The method of claim 10, wherein the two shot molding operation is performed in a single mold assembly.

[c20] The method of claim 10, wherein the two shot molding operation is performed in one of a fixed or rotating mold assembly.